ARGUMENTS/REMARKS

Applicants would like to thank the examiner for the careful consideration given the present application, and for the personal interview conducted on July 15, 2004. The application has been carefully reviewed in light of the Office action and the interview, and amended as necessary to more clearly and particularly describe and claim the subject matter which applicants regard as the invention.

Claims 1-18 remain in this application.

Applicant notes that the Examiner agreed to reconsider claim 6 in light of the personal interview (as discussed below).

Claims 5 and 14 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicant disputes that the claim language was indefinite in light of the application disclosure. However, the claims have been amended, making this rejection moot. At the personal interview, the Examiner expressed an understanding of the claim language. Accordingly, the language is not indefinite.

Claims 5 and 14 were rejected under 35 U.S.C. §112, first paragraph, as not being enabled by the specification. For the following reasons, the rejection is respectfully traversed:

The Examiner states that the phrase "for input to said second amplifier" was not specifically described by the specification. The language has been amended, to clarify what was already clear from the specification and apparent from the claim language, that a matching unit "performs a matching operation of a characteristic of said second power amplifier on an input to said second power amplifier". This is clearly supported by the specification, in particular by referring to FIG. 1, items 21 and 20, where it is clear that item 21 (the matching circuit) outputs a signal that is input to item 21 (an amplifier), as one skilled in the art would understand the drawing. Applicant notes that the Examiner admitted during the personal interview that the Office action was not clear on this issue, and that FIG. 1 was not unclear. Accordingly, the rejection should be withdrawn because the claim language is supported by the specification to enable one skilled in the art to practice the invention as claimed by claims 5 and 14.

Claims 1-4 and 10-13 were rejected under 35 U.S.C. §102 as being anticipated by Tiedemann *et al.* (U.S. WO 96/31,014). For the following reasons, the rejection is respectfully traversed.

Claim 1, as amended, recites a wireless communication apparatus having a "control period changing unit which dynamically changes a control period of the transmission power control bit...in response to a transmission condition". Claim 10 recites a method with similar limitations. Tiedemann does not suggest any such unit or step.

The Examiner cites page 5, lines 6-25, as teaching the cited element of claims 1 and 10. However, as discussed at the personal interview, a close reading of the reference does not support a teaching of the cited element.

The cited passage of Tiedemann discusses a velocity of a mobile station with respect to a base station. There is no discussion of changing a control *period* of the transmission power control bit. Instead, Tiedemann is merely discussing a device such that a base station can sense a relative motion of a mobile station by monitoring a shift in the received signal (such as a Doppler shift) (see lines 18-22). But such a teaching does not suggest the cited element of claim 1.

Further, the Examiner argued in the Office action that the Tiedemann "delay period" teaches the cited limitations (discussed in Tiedemann on page 4, line 38 to page 5, line 5; page 9, lines 9-22 and 33-36, and page 11 at lines 30-34). However, as discussed at the personal interview, a close reading of those sections also fails to support the Examiner assertions.

It was discussed at the personal interview that the "delay period" of Tiedemann is clearly not related to any period associated with a transmission power control bit. Instead, the "delay period" as taught by Tiedemann corresponds to a defined power decay subsequent to a power spike in response to a request for increased power (See the discussion on pages 10 and 11). There is no teaching that this "delay period" is in any way associated with a period change for the transmission power control bit. In fact, the reference clearly states that the power adjustment suggested by the transmission power control bit is either ignored, or diminished in effect (page 11, lines 20-25 and 29-34). But there is no suggestion that any *period* of the control bit is changed.

In contrast, the invention as claimed does not necessarily ignore the transmission power control bit. Instead, its *period* is dynamically changed in order to make the closed-loop response more or less responsive. It was discussed in detail at the interview that the reference does not teach dynamically changing the period based on a transmission condition. The Examiner agreed that it appeared that the reference does not teach the amended language.

Accordingly, claims 1 and 10 are patentable over Tiedemann. Claims 2-4, which

depend, directly or indirectly, on claim 1, and claims 11-13, which depend, directly or indirectly, on claim 11, are all patentable for the same reasons as their parent claim (as well as for the limitations contained therein.

Claims 5, 6, 9, 14, 15 and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kasamatsu (U.S. 5,852,770) in view of Cygan *et al.* (U.S. 5,564,086), and further in view of Tetsuaki (Japanese App. No. 07-020790). For the following reasons, the rejection is respectfully traversed.

Claim 5, as amended, recites a "matching unit which performs a matching operation of a characteristic of said second power amplifier as an input to said second power amplifier". Claim 14, as amended, recites a step of "matching a characteristic of the second power amplifier by way of a matching circuit as an input to said second power amplifier". The cited references do not teach these elements of the claims, even if combined.

The Examiner admits that Kasamatsu does not teach the cited element. Instead, the Examiner cites Cygan as teaching the cited elements, with Tetsuaki cited for teaching a matching circuit at the *input* of an amplifier. However, as discussed at the personal interview, Cygan's variable matching network provides an input into a directional coupler, not a "second power amplifier" as recited in the claim. Further, Tetsuaki does not teach any "matching control unit", which was also discussed at the personal interview. Instead, the Examiner relied on the processor of Cygan for teaching the "matching control unit". However, the matching circuit of Tetsuaki is made up of passive elements (see paragraph [0005], where the matching circuit 11 is described as being formed from the distributed inductance L1 and the fixed capacitative elements C1, C2, and C3). Thus, there is nothing to control, and thus the combination of the control unit of Cygan and the input matching unit of Tetsuaki would be inoperative, because the Tetsuaki input matching circuit cannot be controlled. Thus, the combination is improper as being inoperative and for not teaching all the limitations of claim 1. Accordingly, claim 5 is patentable over the references, even if combined.

Claim 6 recites a "matching control unit", a "power amplification control unit" and an "error calculating unit" which "calculates an error between the corrected transmission power and target transmission power, wherein both said power amplification control unit and said matching control unit execute the control operations thereof based upon the calculated error". As discussed at the personal interview, the references do not teach calculating an error between the "corrected transmission power" and the "target transmission power". None of the references appear to use any "corrected transmission power" for comparison purposes against a target power. Furthermore, none of the references suggest a matching control unit

that inputs such an error, and neither do they teach a power amplification control unit that inputs such an error. Finally, none of the references teach inputting such an error into *both* a matching control unit *and* a power amplification unit, as recited in the claim. Thus, claim 6 is patentable over the references, even if combined. At the personal interview, the Examiner agreed to reconsider the rejection based on these arguments.

Claims 7-9, which depend, directly or indirectly, on claim 6, and claims 15-18, which depend, directly or indirectly, on claim 14, are thus patentable over the references for the same reasons as their parent claim (as well as for the limitations contained therein).

Further, the Examiner has not provided the proper motivation for making the combination. The burden is on the Examiner to make a prima facie case of obviousness (MPEP §2142). To support a prima facie case of obviousness, the Examiner must show that there is some *suggestion* or *motivation* to modify the reference(s) (MPEP §2143.01). The mere fact that references *can* be combined or modified, alone, is not sufficient to establish prima facie obviousness (*Id.*). The prior art references must also suggest the *desirability* of the combination (*Id.*).

The Examiner has not cited any portion of either reference to support any such suggestion or motivation for the combination. A conclusory statement of benefit or advantage, such as the one provided by the Examiner in the Office action, is not sufficient to show obviousness. Instead, some rationale for combining the references must be found in the references themselves, or drawn from a convincing line of reasoning based on established scientific principles practiced by one skilled in the art that some advantage or beneficial result would be produced by the combination (MPEP §2144). Such motivation cannot be found in the application itself, as such hindsight is impermissible; the facts must be gleaned from the prior art. (MPEP §2142, last paragraph).

The Examiner has provided only a statement as to the possible benefits of combining the references. The Examiner has not shown where in the prior art such motivation is found. Neither reference suggests adding the matching circuit of Cygan to the device of Tiedemann. There is nothing in Tiedemann that suggests a matching circuit applied in the manner recited in the claims. Further, there is nothing in Cygan that suggests adding the elements of Tiedemann to the device of Cygan.

In essence, the Examiner is arguing that, because Cygan teaches benefits for its matching circuit, then it would be obvious to add it to the Tiedemann device. That is an improper motivation, because it would apply to *any* reference, making the patenting of any new combinations impossible. Of *course* the elements of Cygan are disclosed as providing a

benefit. Why else would they be included by that inventor? But what would motivate one reading Cygan to combine its matching circuit with Tiedemann? Or vice versa? The Examiner has failed to provide any such proper motivation. Instead, the Examiner must rely on the invention disclosure for providing the proper motivation, and that is not proper. Accordingly, the rejection for obviousness is improper, and should be withdrawn.

Claims 7, 8, 16 & 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kasamatsu (U.S. 5,852,770) in view of Cygan *et al.* (U.S. 5,564,086) and Tetsuaki (Japanese App. No. 07-020790), and further in view of Gilhousen *et al.* (U.S. 5,056,109). For the following reasons, the rejection is respectfully traversed.

Claims 7 and 8 depend, directly or indirectly, on claim 6, and claims 16 and 17 depend, directly or indirectly, on claim 14. Gilhousen does not overcome the shortcomings of Kasamatsu and Cygan discussed above, and thus claims 7, 8, 16 & 17 are patentable over the combination of references for at least the same reasons discussed above for claims 6 or 14.

Furthermore, claim 7 recites an "error selecting unit" which "selects an error occurred in an effective control section from the plurality of errors which are calculated over a plurality of control sections", wherein "both said power amplification control unit and said matching control unit execute the control operations based upon the selected error". Claim 16 recites similar limitations as steps in a method at lines 2-6.

The Examiner admits that neither Kasamatsu nor Cygan teach the suggested claim limitations. Instead, the Examiner cites Gilhousen as teaching the cited limitations.

However, the cited portions of Gilhousen do not teach any "error selecting unit". Instead, Gilhousen merely discusses error detection and correction coding. This does not suggest an "error selecting unit" as recited in the claims.

Still further, Gilhousen does not teach any "matching unit". Thus, Gilhousen cannot teach that *both* the power amplification control unit *and* the matching control unit "execute the control operations based upon the selected error". The prior art reference(s) must teach or suggest *all* of the claim elements and/or claim limitations (MPEP §2143.03), but none of the references suggest that a "matching control unit" executes the control operations based upon the "selected error", as claimed. Hence, the references, even if combined, fail to teach all of the limitations of the claims.

In response to the above arguments provided by applicant in the last response, the Examiner argues that "a recitation of an intended use of the claimed invention must result in

a structural difference...." Applicant has not recited any use. Instead, applicant has recited structure, i.e., an "error selecting unit" having a function of selecting "an error occurred in an effective control section from the plurality of errors which are calculated over a plurality of control sections".

Furthermore, the claim specifies that "both said power amplification control unit and said matching control unit execute the control operations based upon the selected error". These are not uses, they are functional limitations of the cited elements. It is clear that functional limitations are proper, and must be considered (see, for example, MPEP §2173.05(g)). The Examiner has not shown how Gilhousen teaches that its error detection and correction coding is used as recited in the claim.

Still further, the Examiner has not shown how Cygan, cited for teaching a matching control unit, teaches executing control operations based upon the "selected error" as recited in the claim. The Examiner states that the references cannot be attacked individually where the rejection is based on a combination. However, the Examiner must show that the combination of references must teach or suggest *each and every* claim element and/or claim limitation (MPEP §2143.03). The Examiner has cited Cygan (and, likely erroneously, Kasamatsu on page 5 of the Office action) as teaching a matching control unit, but has failed to show how Cygan teaches the matching control unit executing control operations based upon a selected error. Thus, the Examiner has failed to show the references teach all of the claim limitations, whether the references are taken as a whole or individually.

Absent such showings discussed above, the references, even if combined, fail to teach all of the limitations of the claims, and hence the claims are patentable over the references..

Finally, as discussed above (for claims 5, 6, 9, 14, 15 and 18), the Examiner has failed to provide the proper motivation for combining the references. Merely listing a benefit of the modification is not sufficient to support a prima facie case of obviousness. Accordingly, claims 7 & 16 are patentable over the references for that reason as well.

Claims 8 & 17, which depend on claims 7 & 16, respectively, are thus patentable over the references for the same reasons as their parent claims (as well as for the limitations contained therein).

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited

to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. 33241.

Respectfully submitted,
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